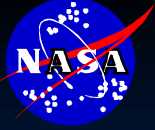


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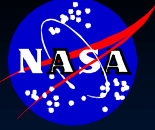
JSC Houston & WSTF Safety & Health Programs: The Journey Continues...



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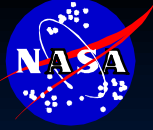
- **Safety & Health VPP Journey Continues...**
- **Continuing Focus on Injuries**
- **Troubled Waters – How Deep?**



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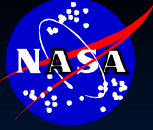


Safety & Health VPP Journey Continues...



Two Organizational Changes

- **Acting Center Director**
 - No change in Safety & Health Priority
- **S&MA “Tweak”**
 - Occ Safety and GFE S&MA were in one Division
 - Now split
 - Flight Hardware Division
 - Safety & Test Operations Division
 - Occ Safety
 - WSTF Operations



Safety, Reliability, and Quality Assurance Office

NASA Johnson Space Center, Houston, Texas



TO: JSC Civil Servants and Contractors
FROM: AA/Acting Director
SUBJECT: Safety

March 5, 2001

Safety must be a part of everything we do--from sending people into space, to working at the office, driving a vehicle, or relaxing at home. We can't take safety for granted because it affects all of us, all of the time. Over the past 7 years, our JSC Team injury rate decreased 45 percent. While this reduced rate is a great improvement, last fiscal year 52 people were injured on the job badly enough to miss a day of work. Also, last year--for the first time in 7 years--the number of people injured increased compared to the previous year.

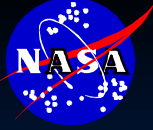
I am very concerned about these injuries and last year's unfavorable trend. Each injury represents pain and suffering for the individual involved, as well as their friends and family. Each injury represents valuable experience lost to the space program while the person recovers. Also, many of these mishaps could have been prevented if someone had thought or asked, "Is this safe?" or "Is there a safer way?"

I am dedicated to providing a safe and healthy workplace for all employees of the Johnson Space Center. **To successfully reverse the increasing rate of injuries, you must take three actions:**

- Take personal responsibility for your own safety**--management will provide you a safe place to work, but you must be conscientious in avoiding unsafe actions.
- Take personal responsibility for the safety of others**--we are our "brother's keeper." Look out for each other; help others so they don't hurt themselves.
- Correct or report any hazardous condition or unsafe work practice**--mishaps can be reduced by removing or controlling hazards. Even more important is eliminating unsafe behavior or unsafe work practices, which typically account for over 80 percent of all injuries.

Safety is constant hard work day after day. There are no easy cures or magic "fixes". We never reach the point where we can say "we've arrived." We must continually work at being safe, reducing hazards, changing unsafe behavior, and increasing our sensitivity and awareness to safety. I am dedicated to reducing our JSC Team injuries--I ask you to join me in making JSC the world's safest workplace.

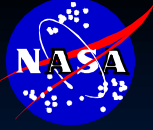
Original signed by Roy S. Estess



VPP Activity Proceeding As Planned

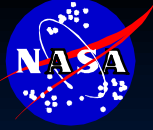
- **Houston**

- VPP STAR Site Achieved in May, 1999
- Region VI Recognition as “STARS among STARS”
 - 1999 and 2000
 - At least 50% below BLS national average for SIC
 - Injury Incident Rate
 - Lost Workday Injury Rate
 - One Less Civil Servant LWC would have placed us in the 75% category: “SuperSTARS among STARS”



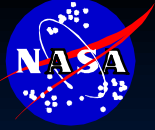
VPP Activity Proceeding As Planned

- **WSTF**
 - **Estimated Spring 2001 application completion**
 - **Trying for simultaneous NASA / Contractor application**
 - **Region VI OSHA Office Agrees**
 - **Simultaneous Application and Site Review**
 - **Complete integration with WSTF Management System**
 - **VPP**
 - **ISO 9000**
 - **ISO 14000**
 - **Pre-Assessments Successful**
 - **HQ PV in July 1999**
 - **JSC External Safety Survey (mock audit) in June 2000**



VPP Activity Proceeding As Planned

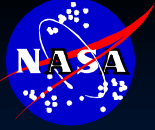
- **JSC Ellington Field (Aircraft Operations Division)**
 - Originally considered “out of scope” by OSHA
 - “Tenant” of Ellington Field, City of Houston Airport Operations
 - Key Item: NASA controls the CoF and M&O for the buildings
 - Draft self evaluation completed
 - Pre-Site visit by OSHA-Houston VPP
 - JSC External Safety Survey in Feb 2001
 - Estimated 3Q FY2001 for 1st draft of application
- **JSC Sonny Carter Training Facility**
 - Station uncertainty could impact employee willingness to get “involved”
 - Draft self evaluation in process
 - Estimated 1Q FY2002 for 1st draft of application



VPP Accomplishments

- **United Space Alliance - Logistics Support Facility**
 - STAR, 1997
- **JSC**
 - STAR, May 1999
- ***United Space Alliance - SFOC Flight Operations**
 - STAR September 2000
- **United Space Alliance - USA Headquarters**
 - STAR September 2000
- ***United Space Alliance - Flight Crew Equipment**
 - STAR September 2000
- ***United Space Alliance - JSC Operations**
 - STAR September 2000
- ***SAIC**
 - STAR, October 2000
- ***Brown And Root Services Pioneer**
 - Merit, December 2000
 - 8A Subcontractor – RWS expected to be awarded Merit in April 2001

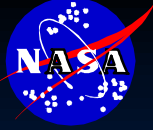
* Would have been “VPP Demo Site” had it not been for new VPP rule on Multi-Employer Worksites



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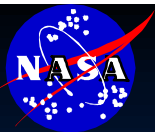
- **Contractor Team Members Increasing VPP Activity**
 - Numerous Contractors have achieved Demonstration or STAR Status
 - Other Contractors Following - Applications in Progress
 - MEI
 - Oceaneering
 - Hamilton-Sundstrand
 - Lockheed-Martin
 - SpaceHab
 - Wyle Laboratories
 - Kelsey-Seybold



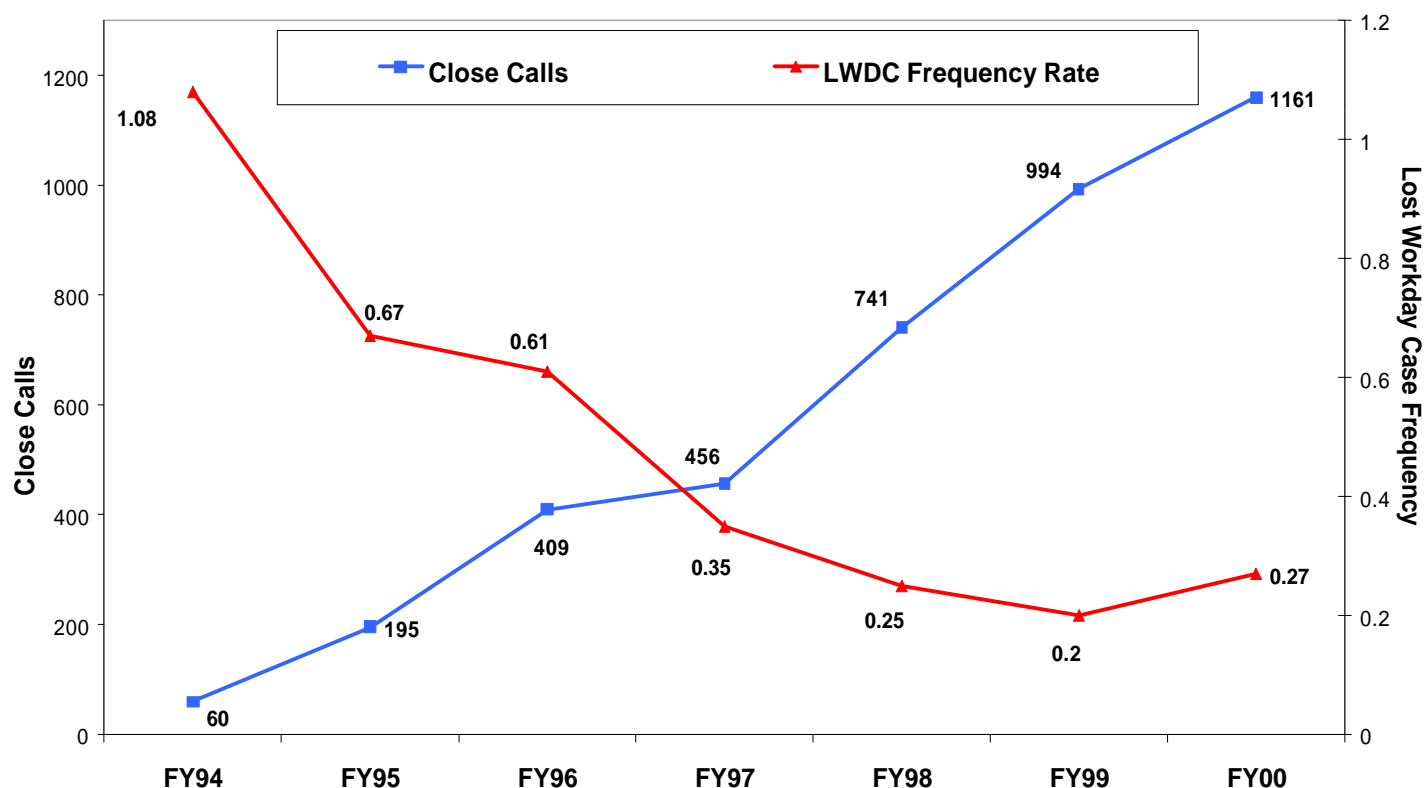
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Continuing Focus on Injuries

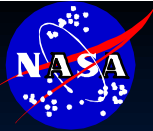


Close Call Reports Continue to Increase, Lost Workday Rates for FY00 Have Increased



JSC Team Lost Workday Case Frequency Rates vs Close Calls

- Demonstrates validity of the DuPont message that there is a relationship between the use of a hazard ("close call") reporting system and the reduction of lost workday cases.

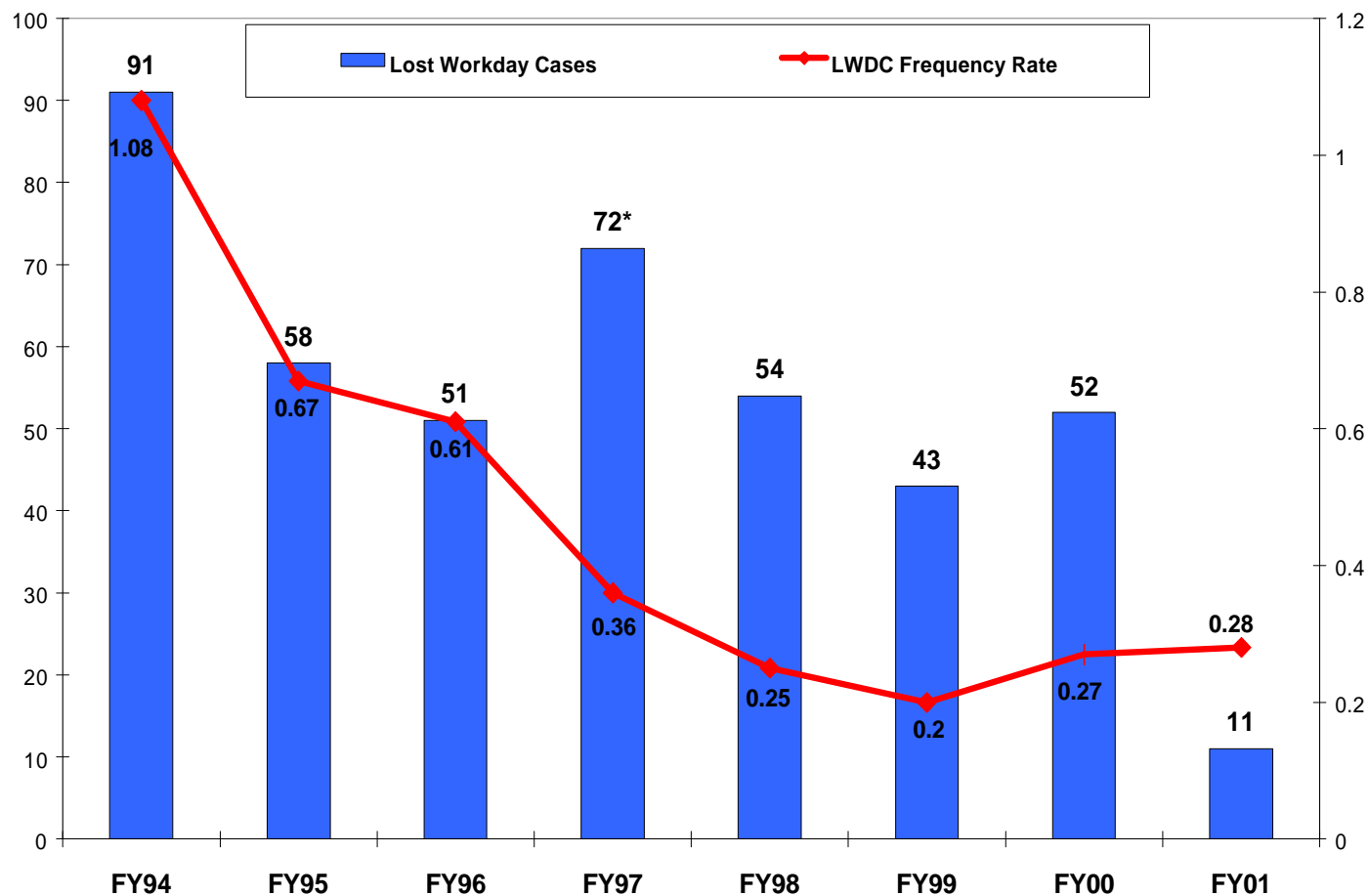


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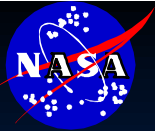
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JSC Team Lost Workday Cases/Rates FY94-01



*FY97: Offsite Contractors Injuries Included

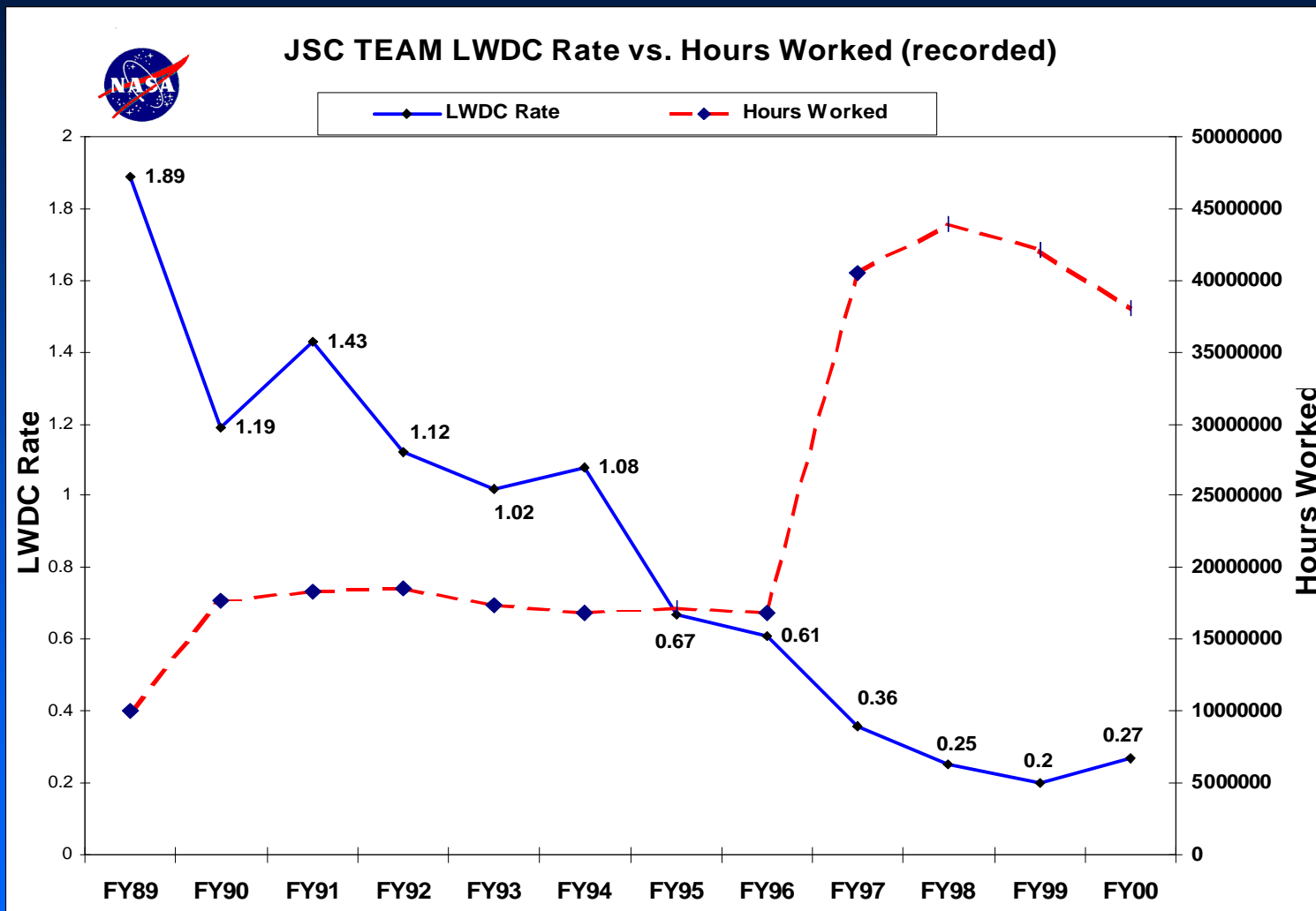


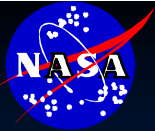
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100 Team Hours Reported Since
Contribution to Success by FY98 & FY00 Data



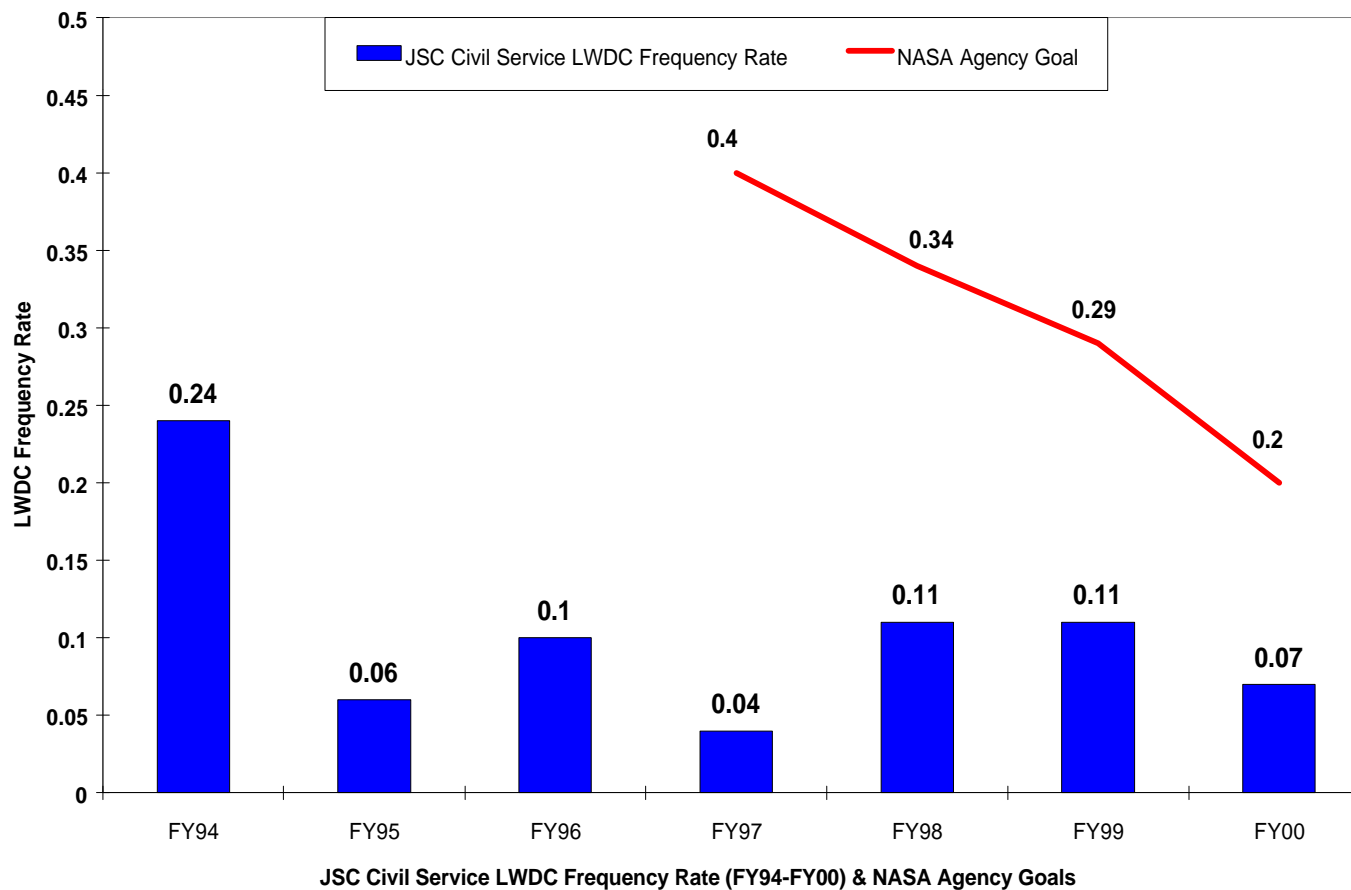


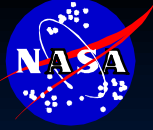
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JSC Civil Service LWDC Frequency Rate Well Below NASA Goal





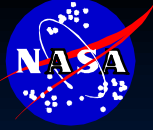
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JSC Safety Initiative

- Lost Workday Injuries – Majority are Contractor Injuries
 - For the past 6 years (absolute numbers, not rates):

<u>Fiscal Year</u>	<u>Total #</u>	<u>Civil Service</u>	<u>Contractor</u>
FY01 (to date)	22	2	20
FY00	52	2	50
FY99	43	3	40
FY98	54	3	51
FY97	72	1	71
FY96	53	3	50

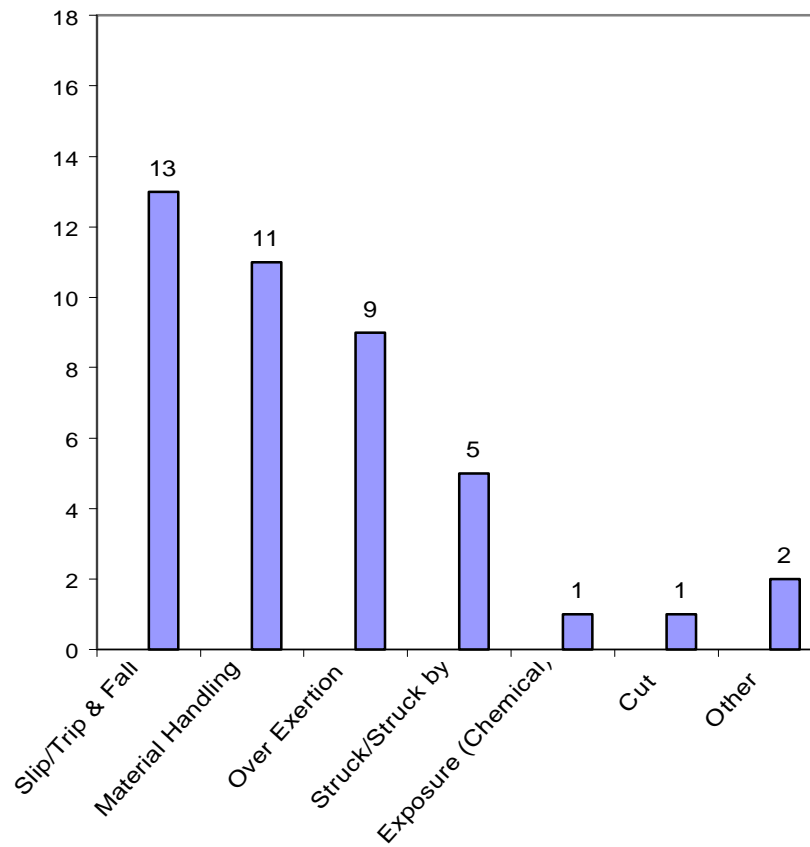


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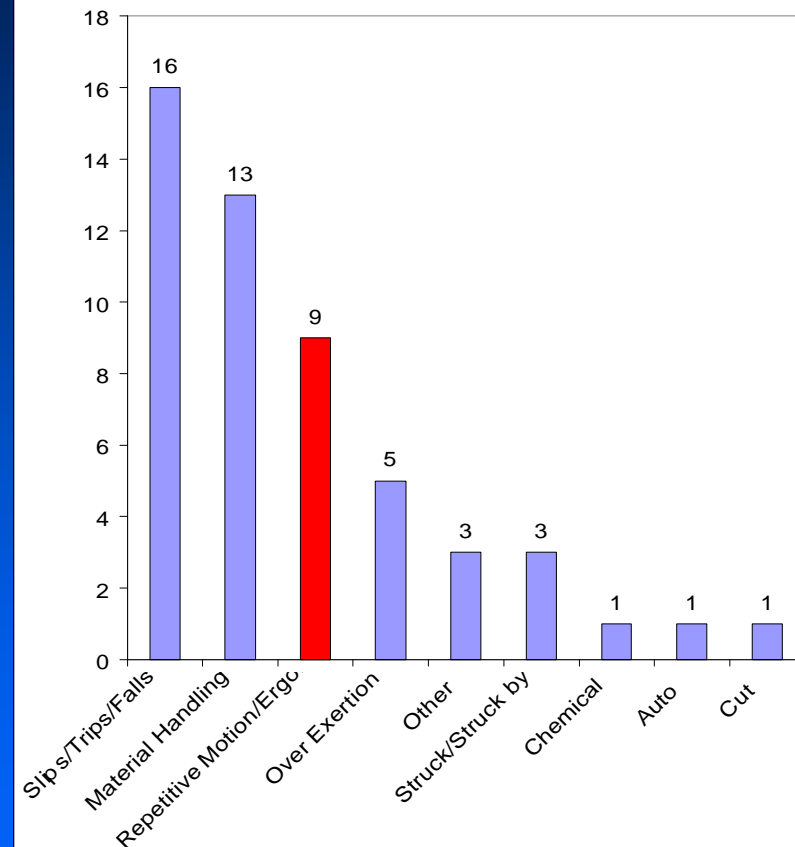
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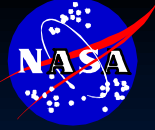


JSC Team LWDC by Category - FY99



JSC Team LWDC by Category - FY00

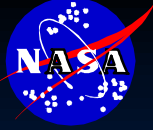




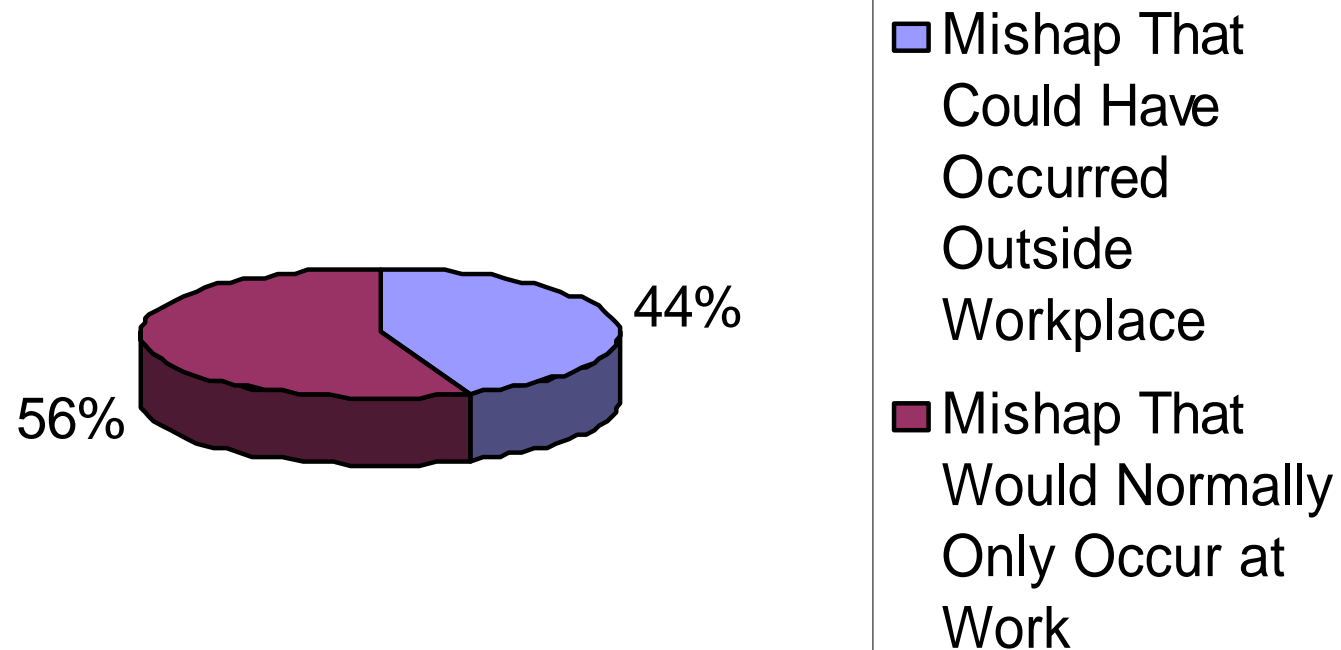
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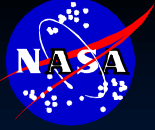


- **FY01 Injury Prevention Focus**
 - Material Handling
 - Slips, Trips, and Falls
 - Repetitive Stress Injuries



Review of FY00 LWDCs indicates that 44% of JSC Team LWDCs could have occurred outside the workplace as part of a person's everyday normal life....



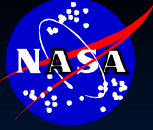


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	AnyTime	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
TTHATT			Slips, Trips, Falls										
Health											S&TH Day		
Safety						Seat Belts "May Peak"					Fire Week S&TH Day "Oct Peak"		
JSAT													
VPP Recert													
OTJ / Home	Driver Distractions					Mem Day Summer Safety		4 th July	Back To School Safety	Labor Day		Holiday Safety Winter Safety	Holiday Safety
Gee Whiz													
SFA													

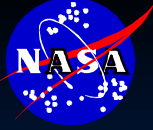


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Unified Safety & Health Awareness

- **Implement Identical Plans Regardless of Work Area:**
 - Same Safety & Health Theme
 - Same Time Frame
- **Cross Functional Team Implementation**
 - Civil Service, Contractor, Health, Safety, JSAT, Etc.



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Unified Safety & Health Campaign

Feb – March

Slips, Trips, and Falls

April

Back Safety

May

Skin Care-Cancer/ Home Safety Fair

June

Summer Safety

July

Ergonomics, Repetitive Motion

August

Lacerations

Sept

Safety & Total Health Day Preps

Oct

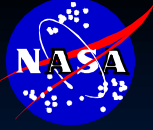
Holiday Safety

Nov

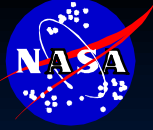
Personal Safety

Dec

4-D's: Drugged, Drunk, Distracted Driving



- **Goals for the Safety Campaign:**
 - Reduce injuries and mishaps for the JSC Team
 - Increase awareness & sensitivity to safety across the board --- flight, workplace, home
- **Major Areas of Emphasis**
 - Contractor initiatives
 - Civil Servant / Contractor Joint Awareness Campaigns
 - “No matter where you work, the theme is the same”
 - Behavior Based Safety
 - Off-The-Job initiatives
 - Reinforces Safety Triad: Flight, Ground, Home

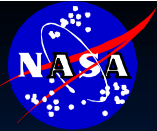


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- **Employee Involvement Continues to be Critical Success Factor**

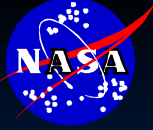




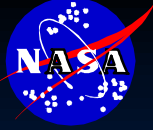
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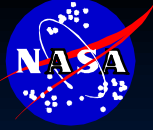
Troubled Waters ... How Deep?



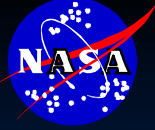
- **String of Recent Mishaps and Incidents**
 - Jun 1 Dropped SEMU
 - Short Extravehicular Mobility Unit
 - Oct 3 ET Separation Camera Failure
 - Dec 4 MDF Uncommanded Motion
 - Manipulator Development Facility
 - Shuttle Ground Training Robotic Arm
 - Jan 29 Overpressurized Flowmeter B7 EMU Lab



- **JSC QSMR Corrective Actions**
 - Search for “one-liners”
 - Review of JSC CO / COTR Surveillance Processes
 - Adequacy of “Surveillance Plan”
 - Content and Implementation
 - Resources to Implement
 - Performance Based Contracting in LOE Culture
 - Lure of ISO 9K
 - Up to now, we backed off invasive Quality surveillance
 - “Back to PPIA” – again
 - Process Integrity Team
 - Step back and look from 30,000 feet
 - 1994 to present Mishaps, Incidents, Close Calls
 - ECD May 1, 2001



- **JSC SR&QA Corrective Actions**
 - Search for “one-liners” & Hazardous Tests
 - Tail Gate Sessions with
 - QA, QE, Test Safety Personnel
 - JSC CO / COTR Surveillance Processes
 - New Round of Quality Audits at Offsite Contractors
 - New Round of Q and S Audits at Onsite Contractors



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BACKUP CHARTS